



BSI Standards Publication

Dimensions of probes and terminal units for medical gas supply systems – Requirements

Publishing and copyright information

The BSI copyright notice displayed in this document indicates when the document was last issued.

© The British Standards Institution 2015

Published by BSI Standards Limited 2015

ISBN 978 0 580 85407 1

ICS 11.040.10

The following BSI references relate to the work on this document:

Committee reference CH/121/6

Draft for comment 14/30295295 DC

Publication history

First published December 1978

Second edition May 1984

Third edition September 1998

Fourth (current) edition June 2015

Amendments issued since publication

Date	Text affected
------	---------------

Contents

Contents *iii*

Foreword *iv*

1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	General requirements	2
5	Probes	2
6	Terminal units	4
7	Marking and colour-coding	6

Bibliography 8

List of figures

Figure 1 – Probe dimensions 3

Figure 2 – Terminal unit indexing ring dimensions 6

List of tables

Table 1 – Diameters of indexing collars and identification symbols of probes 4

Table 2 – Diameters of indexing rings and identification symbols of terminal units 5

Table 3 – Symbols and colour coding for probes and terminal units 7

Summary of pages

This document comprises a front cover, an inside front cover, pages i to iv, pages 1 to 8, an inside back cover and a back cover.

Foreword

Publishing information

This British Standard is published by BSI Standards Limited, under licence from The British Standards Institution, and came into effect on 30 June 2015. It was prepared by Subcommittee CH/121/6, *Medical gas supply systems*, under the authority of Technical Committee CH/121, *Anaesthetic and respiratory equipment*. A list of organizations represented on this committee can be obtained on request to its secretary.

Supersession

This British Standard supersedes BS 5682:1998, which is withdrawn.

Information about this document

This is a full revision of the standard, which takes account of product development and changes in products since the last edition. Its principal changes are:

- a) introduction of dimensions for probes and terminal outlets for helium/oxygen mixtures;
- b) specifications for the dimensions of the terminal outlets for all specified medical gases.

Presentational conventions

The provisions of this standard are presented in roman (i.e. upright) type. Its requirements are expressed in sentences in which the principal auxiliary verb is "shall".

Commentary, explanation and general informative material is presented in smaller italic type, and does not constitute a normative element.

Requirements in this standard are drafted in accordance with *Rules for the structure and drafting of UK standards*, subclause J.1.1, which states, "Requirements should be expressed using wording such as: 'When tested as described in Annex C the product shall ...'". This means that only those products that are capable of passing the specified test will be deemed to conform to this standard.

Contractual and legal considerations

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with a British Standard cannot confer immunity from legal obligations

1 Scope

This British Standard specifies dimensions for probes and terminal units for the supply of medical gases (including vacuum).

It is applicable to probes and terminal units for the following medical gases:

- oxygen;
- nitrous oxide;
- oxygen/nitrous oxide mixture;
- medical air 400 kPa;
- medical air 700 kPa and above;
- helium/oxygen mixture; and
- vacuum.

This standard does not include specifications for probes and terminal units for:

- nitrogen for driving surgical tools;
- carbon dioxide; or
- oxygen 93.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

BS EN ISO 18082, *Anaesthetic and respiratory equipment – Dimensions of non-interchangeable screw-threaded (NIST) low-pressure connectors for medical gases*

BS EN ISO 5359, *Anaesthetic and respiratory equipment – Low-pressure hose assemblies for use with medical gases*

BS EN ISO 6506-1, *Metallic materials – Brinell hardness test – Test method*

BS EN ISO 9170-1:2008, *Terminal units for medical gas pipeline systems – Terminal units for use with compressed medical gases and vacuum*

ISO 1102, *Gas cylinders for medical use – Marking for identification of content*

3 Terms and definitions

For the purposes of this British Standard, the terms and definitions given in BS EN ISO 9170-1 and the following apply.

3.1 direct probe

integral part of a medical device that connects to a terminal unit

3.2 probe

gas-specific male component designed for acceptance by and retention in the socket of a terminal unit

[SOURCE: BS EN 9170-1:2008, 3.11]

3.3 probe insert

portion of a probe pushed into and secured within the bore (lumen) of the hose

NOTE Probe inserts are also known as probe tails or probe spigots.